

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor C. Stephen Alired, Director

March 14, 2003

## CERTIFIED MAIL No. 7000 1530 0005 5348 6445

Dwayne Gibson Plant Manager Koch Materials Co. 4303 Gekeler Lane Boise, ID 83716

RE:

AIRS Facility No. 001-00049, Koch Materials Co., Boise

Final Tier II Operating Permit

Dear Mr. Gibson:

The Department of Environmental Quality (Department) is issuing Tier II Operating Permit No. 001-00049 for the Koch Materials Co., facility located Boise, in accordance with IDAPA 58.01.01.400 - 406, Rules for the Control of Air Pollution in Idaho (Rules). The enclosed Tier II operating permit is based on the information contained in your permit application and on the relevant comments received during the public comment period. This Tier II permit is effective immediately and supersedes your previous Tier II permit issued April 4, 1997. Modification to and/or renewal of this Tier II permit shall be requested in a timely manner in accordance with the Rules.

The Boise Regional Office will contact you regarding a meeting with the Department to discuss the permit terms and requirements. The Department recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call William Rogers at (208) 373-0502 to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Stephen E. West, Administrator

Air Quality Division

SEW/REB/sm T2-020009

Enclosure



# **Air Quality TIER II OPERATING PERMIT**

State of Idaho Department of Environmental Quality **PERMIT NO.: 001-00049** 

AQCR: 64

CLASS: SM

SIC:

2951

**ZONE: 11** 

UTM COORDINATE (km):

565.3, 4823.7

#### 1. PERMITTEE

Koch Materials Co.

2. PROJECT

Tier II operating permit renewal

	<del>/////////////////////////////////////</del>		<del></del>			
3. MAILING ADDRESS	CITY	STATE	ZIP			
4303 Gekeler Lane	303 Gekeler Lane Boise		83716			
4. FACILITY CONTACT	TITLE	TELEPHONE				
Dwayne Gibson	Plant Manager	208-345-2538				
5. RESPONSIBLE OFFICIAL	RESPONSIBLE OFFICIAL TITLE		TELEPHONE			
J. Shane Bailey	J. Shane Bailey Regional Operations Manager		208-345-2538			
6. EXACT PLANT LOCATION		COUNTY				
4303 Gekeler Lane, Boise, Idaho		Ada				

# 7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Asphalt/Asphalt Emulsions/ Asphalt Cutback

#### 8. PERMIT AUTHORITY

This permit is issued according to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.400, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be operated by this permit.

This permit has been granted on the basis of design information presented in the application and the Idaho Department of Environmental Quality's technical analysis of the supplied information. Changes in design or equipment that result in any change in the nature or amount of emissions may be considered a modification. Modifications are subject to Department review in accordance with IDAPA 58.01.01.200.

STEPHEN ALLRED, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED:

**MARCH 14, 2003** 

DATE EXPIRES: MARCH 14, 2008

CSA/MS/sm PMT.DOC

G:VAIR QUALITY/STATIONARY SOURCE/SS LTD/T2/KOCH MAT. CO-BOISE/FINAL/T2-020008 KOCH FINAL

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# LIST OF ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AQCR Air Quality Control Region

CO carbon monoxide

dscf dry standard cubic feet

EPA United States Environmental Protection Agency

gal/mo gallons per month

gr grain (1 lb = 7,000 grains)

IDAPA Idaho Administrative Procedures Act

km kilometer kPa kilo Pascal lb/hr pound per hour M³ cubic meters

MMBtu/hr million British thermal units per hour

NO<sub>X</sub> nitrogen oxides

NSPS New Source Performance Standards

O&M Operations and Maintenance

PM particulate matter

PM<sub>10</sub> particulate matter with an aerodynamic diameter of 10 micrometers or less

Scf/yr standard cubic feet per year
SIC Standard Industrial Classification

SM synthetic minor SO<sub>2</sub> sulfur dioxide

therm unit equivalent to 100,000 British thermal units

therms/yr therms per year T/yr tons per year

UTM Universal Transverse Mercator VOC volatile organic compound VOL volatile organic liquid

Permittee: Koch Materials Co

Location: Boise, Idaho

Date Issued:

March 14, 2003

Date Expires: March 14, 2008

# 1. TIER II OPERATING PERMIT SCOPE

# **Purpose**

1.1 The purpose of this Tier II operating permit is the renewal of the Tier II permit issued April 4, 1997, and to permit sources constructed at the facility since the previous permit.

- 1.2 This Tier II permit replaces the following permit:
  - Tier II Operating Permit No. 001-00049, issued April 4, 1997

**Koch Materials Co** Permittee:

Date Issued:

Location:

Boise, Idaho

Date Expires:

March 14, 2003 March 14, 2008

# **Regulated Sources**

Table 1.1 below lists all sources of emissions regulated in this Tier II operating permit. 1.3

**Table 1.1 EMISSIONS SOURCES** 

Permit Condition	Source Description	Emissions Control(s)				
3	Tank No. 1; 2,121,00 gallon	None				
3	Tank No. 2; 1,071,000 gallon	None				
3	Tank No. 4; 105,800 gallon	None				
3	Tank No. 5; 105,800 gallon	None				
3	Tank No. 6; 105,800 gallon	None				
3	Tank No. 7; 105,800 gallon	None				
3	Tank No. 8; 50,900 gallon	None				
3	Tank No. 9; 105,800 gallon	None				
3	Tank No. 10; 13,500 gallon	None				
3	Tank No. 12; 50,200 gallon	None				
3	Tank No. 13; 105,800 gallon	None				
3	Tank No. 14; 47,000 gallon	None				
3	Tank No. 15; 50,200 gallon	None				
3	Tank No. 16; 79,400 gallon	None				
3	Tank No. 17; 105,800 gallon	None				
3	Tank No. 18; 50,600 gallon	None				
3	Tank No. 19; 38,100 gallon	None				
3	Tank No. 20; 50,200 gallon	None				
3	Tank No. 21; 66,300 gallon	None				
3	Tank No. 22; 50,200 gallon	None				
3	Tank No. 23; 50,200 gallon	None				
3	Tank No. 24; 50,200 gallon	None				
3	Tank No. 25; 36,100 gallon	None				
3	Tank No. 26; 30,100 gallon	None				
3	Tank No. 27; 28,600 gallon	None				
3	Tank No. 28; 24,100 gallon	None				
3	Tank No. 29; 21,300 gallon	None				
3	Tank No. 31; 16,900 gallon	None				
3	Tank No. 36; 10,600 gallon	None				
3	Tank No. 38; 4,220,000 gallon	None				
3	Tank No. 39; 13,500 gallon	None				
3	Tank No. 40; 21,300 gallon	None				
3	Tank No. 41; 16,900 gallon	None				
3	Tank No. 48; 192,500 gallon	None				
3	Tank No. 49; 1,322,000 gallon	None				
3	Tank No. 50; 1,322,000 gallon	None				
3	Tank No. 51; 51,100 gallon	None				

Permittee: Koch Materials Co

Date Issued:

March 14, 2003

Location:

Boise, Idaho

Date Expires: March 14, 2008

# **Other Sources**

1.4 Table 1.2 below lists all sources of emissions that are not regulated in this Tier II operating permit:

**Table 1.2 EMISSION SOURCES** 

Source Description	Emissions Control(s)					
Tank No.3; 7,500 gallon	None					
Tank No. 11; 11,800 gallon	None					
Tank No. 30; 6,500 gallon	None					
Tank No. 32; 6,000 gallon	None					
Tank No. 33; 6,000 gallon	None					
Tank No. 34; 10,000 gallon	None					
Tank No. 35; 6,000 gallon	None					
Tank No. 37; 12,100 gallon	None					
Tank No. 42; 4,100 gallon	None					
Tank No. 43; 8,800 gallon	None					
Tank No. 44; 4,800 gallon	None					
Tank No. 45; 8,800 galion	None					
Tank No. 46; 6,000 gallon	None					
Tank No. 47; 10,500 gallon	None					
Waste-oil burner	None					
2 – Parts washers	None					
Asphalt reclaim pot	None					
QA/QC lab and associated equipment	None					
Equipment used by maintenance crews	None					
Welding and cutting torches	None					
Plant vehicles	None					
2 – Emulsion mills	None					
3 – Hot water tanks	None					
Water softener system	None					
Process water tank	None					

Permittee: Koch Materials Co

Date Issued:

March 14, 2003

Location: Boise, Idaho

Date Expires:

March 14, 2008

# 2. FACILITY-WIDE CONDITIONS

# Fugitive Emissions

- 2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and activities and atmospheric conditions that might affect the movement of PM. Some of the reasonable precautions include, but are not limited to, the following:
  - Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings
    or structures, construction operations, the grading of roads, or the clearing of lands.
  - Application, where practical, of asphalt, oil, water, or suitable chemicals to, or covering of dirt roads, material, stockpiles, and other surfaces that can create dust.
  - Installation and use, where practical, of hoods, fans, fabric filters, or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
  - Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts.
  - Paving of roadways and their maintenance in a clean condition, where practical.
  - Prompt removal of earth or other stored material from streets, where practical.
- 2.2 The permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions.
- 2.3 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, include the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

#### **Odors**

- 2.4 No person shall allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.
- 2.5 The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, include the date that each complaint was received and a description of the following: the complaint; the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

### Visible Emissions

2.6 The permittee shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, or chlorine gas are the only reason(s) for the failure of the emission to comply with the requirements of this section.

Koch Materials Co Permittee:

Date Issued: March 14, 2003 Boise, Idaho Date Expires: March 14, 2008 Location:

#### Excess Emissions

2.7 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

# Reports and Certifications

Any reporting required by this permit, including, but not limited to, records, monitoring data, supporting 2.8 information, requests for confidential treatment, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. Any reporting required by this permit shall be submitted to:

> Air Quality Permit Compliance Department of Environmental Quality **Boise Regional Office** 1445 N. Orchard Boise, Idaho 83706

Any reporting required for New Source Performance Standards shall also be submitted to EPA at the following address:

**EPA Region 10** Air Operating Permits, OAQ-107 1200 Sixth Ave. Seattle, WA 98101

# Monitoring and Recordkeeping

2.9 The permittee shall maintain sufficient recordkeeping to ensure compliance with all the terms and conditions of this operating permit. Recording of monitoring information shall include, but not limited to, the following: (a) the date, place, and times of sampling or measurement; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurements. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to Department representatives upon request.

# **Open Burning**

The permittee shall comply with the requirements of IDAPA 58.01.01.600-616, Rules for Control of Open 2.10 Burnina.

#### Fuel-Burning Equipment

2.11 The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal. and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

Permittee: Koch Materials Co

Date Issued:

March 14, 2003

Location:

Boise, Idaho

Date Expires:

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# **Obligation to Comply**

2.12 Receiving a Tier II operating permit shall not relieve any owner or operator of the responsibility to comply with all applicable local, state, and federal rules and regulations.

Permittee: Koch Materials Co

Location: Boise, Idaho

Date Issued:

March 14, 2003

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## 3. STORAGE TANKS

#### 3.1 Process Description

The primary purpose of the emissions units are for the storage and mixing of various materials to meet the specifications of clients then have the material shipped. The largest volumes of material are asphalt cement, asphalt emulsion, and asphalt cutback.

#### **Emissions Limits**

### 3.2 Emissions Limits

The VOC emissions from the combined storage tanks stack shall not exceed any corresponding emission rate limits listed in the appendix of this permit.

# **Operating Requirements**

#### 3.3 Throughput Limits

- The maximum annual throughput of the asphalt cement shall not exceed 157,282,436 gallons per any
  consecutive 12-month period.
- The maximum annual throughput of the asphalt emulsion shall not exceed 49,999,700 gallons per any consecutive 12-month period.
- The maximum annual throughput of the asphalt cutback shall not exceed 15,000,000 gallons per any
  consecutive 12-month period.
- The maximum annual throughput of the naphtha shall not exceed 9,000,000 gallons per any consecutive 12-month period.
- The maximum annual throughput of the No.1 fuel oil shall not exceed 2,250,000 gallons per any
  consecutive 12-month period.
- The maximum annual throughput of the No.2 fuel oil shall not exceed 2,250,000 gallons per any
  consecutive 12-month period.
- The maximum annual throughput of the emulsifier and/or extender shall not exceed 2,500,000 gallons per any consecutive 12-month period.

Permittee: Koch Materials Co

Boise, Idaho

Date Issued:

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March 14, 2008

# Monitoring and Recordkeeping Requirements

#### 3.4 Throughput Monitoring

Location:

Each month, the permittee shall monitor and record the throughput of each material stated in Permit Condition 3.3 for that month and for the most recent 12-month period.

# Reporting Requirements

## 3.5 New Source Performance Standards (NSPS)

The permittee shall perform all reporting requirements for each applicable storage tank as defined by 40 CFR Part 60 Subpart K or Subpart Kb.

The owner or operator subject to 40 CFR Part 60 Subpart K, § 60.113 shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

In accordance with 40 CFR Part 60 Subpart Kb, § 60.116b, the owner or operator of each storage vessel shall keep readily accessible records showing the dimension of the tank and an analysis showing the capacity. Each storage vessel with a design capacity less than 75 m³ is subject to no provision of this subpart other than those required by this paragraph.

In accordance with 40 CFR Part 60 Subpart Kb, § 60.116c, the owner or operator of each storage vessel with either a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

Permittee: Koch Materials Co

Date Issued:

March 14, 2003

Location:

Boise, Idaho

Date Expires: March 14, 2008

# 4. FUEL-BURNING EQUIPMENT

#### 4.1 Process Description

The fuel-burning equipment consist of two 16.74 MMBtu/hr Kewanee boilers and a 14.5 MMBtu/hr hot-oil heater. The primary purpose of the boilers is to heat the asphalt material in the rail cars to allow it to be pumped into the storage tanks. The primary purpose of the hot-oil heater is to heat specific storage tanks to maintain the material for pumping.

#### **Emissions Limits**

#### 4.2 Emissions Limits

The PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>X</sub>, CO, and VOC emissions from the Kewanee boilers and the hot-oil heater stacks shall not exceed any corresponding emissions rate limits listed in the appendix of this permit.

# **Operating Requirements**

#### 4.3 Throughput Limits

The maximum annual throughput natural gas for the Kewanee boilers and the hot-oil heater combined shall not exceed 401,000,000 scf or the equivalent of 4,210,000 therms per any consecutive 12-month period.

**Koch Materials Co** Permittee:

Date Issued: March 14, 2003 **Date Expires:** March 14, 2008 Location: Boise, Idaho

#### 5. LOADING RACKS

#### 5.1 **Process Description**

The primary purpose of the loading racks is to load the finished blend of product into trucks for shipment.

## **Emissions Limits**

#### 5.2 **Emissions Limits**

The VOC emissions from the loading racks shall not exceed any corresponding emissions rate limits listed in the appendix of this permit.

# **Operating Requirements**

#### **Throughput Limits** 5.3

The maximum annual throughput of the loading racks are 50,000,000 gallons of asphalt cement. 50,000,000 gallons of asphalt emulsion, and 15,000,000 gallons of asphalt cutback per year. The maximum annual throughput of the loading racks shall not exceed 115,000,000 gallons per any consecutive 12-month period (115 MM Gal/yr).

# Monitoring and Recordkeeping Requirements

#### 5.4 **Throughput Monitoring**

Each month, the permittee shall monitor and record the throughput of asphalt cement, asphalt emulsion, and asphalt cutback for that month in gallons per month (gal/mo) and for the most recent 12-month period.

Permittee: Koch Materials Co

Location: Boise, Idaho

Date Issued:

March 14, 2003

Date Expires: 1

March 14, 2008

# 6. APPENDIX - EMISSION LIMITS

**Table 6.1 EMISSION LIMITS** 

Emission Limits" – Hourly (lb/hr), and Annual <sup>b</sup> (T/yr)										
Source Description	Hourly PM <sub>is</sub> s Emissions (lb/hr)	Annual PM <sub>10</sub> ° Emissions (T/yr)	NO,		60		YOG		SO2	
			lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	Т/уг
Two, 14 MMBtu/hr, Kewanee boilers and a 12 MMBtu/hr hot-oil heater, collectively	0.4	1.6	4.7	20.6	4.0	17.3	0.3	1.1	0.03	0.1
Asphalt cement, asphalt emulsion, asphalt cutback, No.1 fuel oil, No.2 fuel oil, naphtha, asphalt extenders and emulsifiers storage tanks, collectively	<u></u>	*-			<del></del>	***	10.5	46	•••	
Loading racks for asphalt cement, asphalt emulsion, and asphalt cutback collectively	- Garage	unui I					20.97	31.5		<del></del>
TOTAL		1.6		20.6		17.3		78.6		0.1

<sup>\*</sup> As determined by a pollutant-specific U.S. EPA reference method, a Department-approved alternative, or as determined by the Department's emissions estimation methods used in this permit analysis.

<sup>&</sup>lt;sup>b</sup> As determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

<sup>&</sup>lt;sup>c</sup> Includes condensable.

Permittee: Koch Materials Co

Location:

Boise, Idaho

Date Issued:

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# 7. TIER II PERMIT GENERAL PROVISIONS

1. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code 39-101 et seq.

- The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho)
  maintain and operate in good working order all treatment or control facilities or systems installed or used to
  achieve compliance with the terms and conditions of this permit and other applicable laws for the control of
  air pollution.
- 3. The permittee shall allow the Director, and/or his authorized representative(s), upon the presentation of credentials:
  - To enter upon the permittee's premises where an emissions source is located, or in which any
    records are required to be kept under the terms and conditions of this permit; and
  - At reasonable times, to have access to and copy any records required to be kept under the terms
    and conditions of this permit, to inspect any monitoring methods required in this permit, and to
    require stack emissions testing (i.e., performance tests) in conformance with state-approved or
    accepted EPA procedures when deemed appropriate by the Director.
- Except for data determined to be confidential under Section 9-342A Idaho Code, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate regional office of the Department of Environmental Quality.
- 5. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
- 6. In the event of any change in control or ownership of source(s) from which the authorized emissions emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter; a copy of which shall be forwarded to the Director.
- 7. This permit shall be renewable on the expiration date, provided the permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within 60 days after receipt of the Director's request shall cause the permit to become void.
- 8. The Director may require the permittee to develop a list of operation and maintenance procedures to be approved by the Department. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.
- The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.